

Appl. No. 09/818,249
Amdt. Dated March 13, 2006
Reply to Office Action of September 12, 2005

Attorney Docket No. 81784.0231
Customer No.: 26021

REMARKS/ARGUMENTS

Claims 3-6 are pending in the Application. Claims 3-6 are submitted to clearly distinguish patentably over the cited art for the reasons set forth hereafter.

In Paragraph 3 which begins on page 2 of the Office Action, claims 3-6 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent 6,088,461 of Lin, et al. in view of U.S. Patent 6,317,502 of Imai. Lin, et al. is said to show the limitations of the claims except for not specifying adjustment in small steps by the digital level adjustment circuit and adjusting in large steps by the analog level adjustment circuit. In this connection, Imai is said to come from the same field of endeavor and to teach the desirability of adjusting the volume in finer steps when the attenuation is low in order to provide a more natural effect in the volume change. According to the Office Action, it would have been obvious to one of ordinary skill to incorporate the varied attenuation taught by Imai with the system of Lin in order to provide a smoother, more natural, volume control output. This rejection is respectfully traversed.

According to the present invention, analog level adjustment is performed when the output level for audio signals indicates a high level and the steps of analog level adjustment are larger than the steps of digital level adjustment. According to the Imai reference, the steps of the level adjustment used when the output level for the audio signal is at a high level are smaller than the steps of level adjustment used when the output level for the audio signal is at a low level. Therefore, Imai is completely different from the present invention, and combining it with Lin neither shows nor suggests the present invention.

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Moreover, Imai does not show or suggest the feature that level adjustments to a desired level are performed gradually in small steps by the digital level adjustment when changing levels.

Claim 3 is submitted to clearly distinguish patentably over the cited references. Among other limitations, claim 3 recites "wherein the steps in said analog level adjustment circuit are large in magnitude of decibel conversion compared to steps in said digital level adjustment circuit". Similar comments apply to independent claim 4 which, among other limitations, recites "a level adjustment step in said digital level adjustment circuit is set smaller than a level adjustment step in said analog level adjustment circuit". Similarly, independent claim 5 recites among other limitations "a level adjustment step in said digital level adjustment circuit is set smaller than a level adjustment step in said analog level adjustment circuit". Therefore, claims 4 and 5 are submitted to clearly distinguish patentably over the cited art in addition to claim 3. Claim 6 depends from and contains all of the limitations of claim 3 so as to also distinguish patentably over the art.

In conclusion, claims 3-6 are submitted to clearly distinguish patentably over the art for the reasons set forth above. Therefore, reconsideration and allowance are respectfully requested.

If for any reason the Examiner finds the application other than in condition for allowance, the Examiner is requested to call the undersigned attorney at the Los Angeles, California telephone number (213) 337-6846 to discuss the steps necessary for placing the application in condition for allowance.

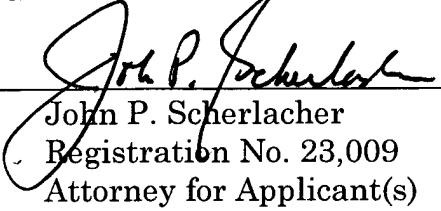
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Respectfully submitted,
HOGAN & HARTSON L.L.P.

Date: March 13, 2006

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